

## **REMARKS**

### **Claim Status**

Claims 1-17 were pending in the case at the time of the current Office Action. Claims 1-12 and 14-17 are currently amended in the application. Claims 1-17 are currently pending in the application.

### **Section 101 Rejections**

In the current Office action, claims 1-10 and 15-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In the instant application, there is no significant claim recitation of the data processing system or calculating computer to show the significant change in the data or for performing calculation operations in Claim 1.

In Claim 15, the computer program itself can not be directed to a practical application of the invention in the useful art to accomplish a concrete, useful, and tangible result. When the computer program is actually executed by the computer, the claimed subject matter produces a useful, concrete and tangible result. The mere recitation of "a data processing system" cannot constitute the actual execution done by the computer system.

Applicants respectfully traverse the foregoing rejections in view of the above pending claims and for reasons set forth hereafter.

Independent claim 1 recites a computerized method for calculating charges for transporting a shipment of freight, said shipment comprising one or more packages, said method comprising the steps of:

gathering physical property data about a carrier unit using a processing system, said physical property data about said carrier unit comprising carrier unit dimensions and weight limit of said carrier unit;

calculating a total available capacity in said carrier unit using said processing system, wherein said total available capacity comprises a weight limit for said carrier unit and a volume of said carrier unit;

storing said total available capacity in said carrier unit in a memory of said processing system;

gathering a distance a first shipment is to be transported using said processing system;

gathering physical property data about said first shipment using said processing system, wherein said physical property data about said first shipment is selected from the group consisting of dimensions of one package in said shipment, volume of one package in said shipment, weight of one package in said shipment, mass of one package in said shipment, dimensions of said shipment, weight of said shipment, volume of said shipment, mass of said shipment, number of packages in said shipment, density of said shipment, class of said shipment;

calculating an amount of said total available capacity to be occupied by said first shipment in said carrier unit using said processing system, wherein said amount of total available capacity to be occupied by said first shipment comprises a total weight of said first shipment and a total volume to be occupied by said first shipment;

storing said amount of said total available capacity occupied by said first shipment in said carrier unit in said memory of said processing system;

calculating a remaining available capacity in said carrier unit, using said processing system, after said first shipment is loaded in said carrier unit;

storing said remaining available capacity in said carrier unit in said memory of said processing system;

calculating a rate to be charged for said first shipment, using said processing system, based upon said amount of said total available capacity occupied by said first shipment in said carrier unit and said distance said first shipment is to be transported;

storing said rate in said memory of said processing system;

calculating a total charge for transporting said first shipment using said processing system;

displaying said total charge on a display of said processing system; and

determining an optimal orientation of said first shipment relative to said carrier unit available capacity using said processing system.

It is clear that independent claim 1 now recites a processing system that is used for carrying out the various steps of the claimed method. The processing system includes a memory for storage and a display. Dependent claims 2-10 also recite the use of a processing system in a similar manner.

Therefore, in view of at least the foregoing, it is respectfully submitted that independent claim 1 is directed to statutory subject matter. Also, since claims 3-10 depend either directly or indirectly from claim 1, it is respectfully submitted that claims 3-10 are directed to statutory subject matter as well. Applicants respectfully request that the rejection of claims 1-10 under 35 U.S.C. 101 be removed.

Independent claim 15 recites a computer program product for use with a data processing system for calculating charges for transporting a shipment of freight, said shipment comprising one or more packages, said product comprising:

a computer usable medium having computer readable program code means embodied in said medium for determining available capacity in a carrier unit when said code means for determining said available capacity in said carrier unit is executed on a data processing system;

the computer usable medium having computer readable program code means embodied in said medium for determining an amount of space to be occupied by a first shipment in said carrier unit when said code means for determining an amount of space to be occupied by said first shipment in said carrier unit is executed on said data processing system;

the computer usable medium having computer readable program code means embodied in said medium for determining remaining capacity in said carrier unit, when said code means for determining said remaining capacity in said carrier unit is executed on said data processing system, after said first shipment is loaded onto said carrier unit;

the computer usable medium having computer readable program code means embodied in said medium for determining an optimal orientation for said first shipment in said carrier unit

when said code means for determining said optimal orientation of said first shipment in said carrier unit is executed on said data processing system;

the computer usable medium having computer readable program code means embodied in said medium for storing said available capacity of said carrier unit, said amount of space to be occupied by said first shipment in said carrier unit, said remaining space in said carrier unit after said first shipment is loaded into said carrier unit, and said optimal orientation of said first shipment in said carrier unit when said code means for said storing is executed on said data processing system; and

the computer usable medium having computer readable program code means embodied in said medium for determining whether additional packages can be added to said carrier unit when said code means for determining whether said additional packages can be added to said carrier unit is executed on said data processing system.

It is clear that independent claim 15 now recites that the various claimed code means perform their respective claimed functions when executed on a data processing system. Dependent claims 16-17 also recite that the various claimed code means, in a similar manner, perform their respective claimed functions when executed on the data processing system.

Therefore, in view of at least the foregoing, it is respectfully submitted that independent claim 15 is directed to statutory subject matter. Also, since claims 16-17 depend either directly or indirectly from claim 15, it is respectfully submitted that claims 16-17 are directed to statutory subject matter as well. Applicants respectfully request that the rejection of claims 15-17 under 35 U.S.C. 101 be removed.

### **Section 112 Rejections**

In the current Office action, claims 11-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 11, lines 1-2, the recitation of “said method” renders the claim indefinite because the claim is directed to the data processing system.

Claim 15 contains the identical indefiniteness as recited above.

Applicants respectfully traverse the foregoing rejections in view of the above pending claims and for reasons set forth hereafter.

Applicants respectfully submit that the amendments herein to claims 11 and 15 overcome the indefiniteness rejection and that the rejection should be removed.

### **Section 102 rejections**

In the current Office action, claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by O’Neill et al. (US 6,219,653).

Applicants respectfully traverse the foregoing rejections in view of the above pending claims and for reasons set forth hereafter.

Claim 1 has been previously recited herein.

It is respectfully submitted that O’Neill et al. (U.S. 6,219,653), hereinafter O’Neill, does not teach or suggest the invention of independent claim 1. For example, O’Neill does not teach or suggest determining an optimal orientation of the first shipment relative to the carrier unit available capacity using the processing system. Applicant does not see anything in O’Neill that refers to optimizing an orientation of a shipment as per the claimed invention. In the claimed invention, “determining an optimal orientation of the first shipment” refers to figuring out how individual packages within the first shipment may be spatially oriented with respect to each other (e.g., how they are stacked or positioned) within the carrier unit to optimize the use of the available volume as described in the specification. O’Neill does not describe, in any way, such a manipulation of the orientation of a shipment in order to optimize the use of the available volume or space. Instead, O’Neill simply describes determining load parameters of a shipment such as weight, volume, and quantity of units of a load or shipment in relation to a capacity of a selected delivery container. O’Neill is silent with respect to any discussion of optimizing an orientation of a shipment and/or units of the shipment. In fact, O’Neill is silent with respect to any

discussion of shipment orientation at all. O'Neill seems to be focused merely on overall gross parameters of a shipment such as total volume, total weight, and number of units in the shipment in relation to the capacity of the selected delivery container.

Therefore, in view of at least the foregoing, it is respectfully submitted that independent claim 1 is not anticipated by O'Neill, and it is respectfully submitted that independent claim 1 defines allowable subject matter. Also, since claims 3-10 depend either directly or indirectly from claim 1, it is respectfully submitted that claims 3-10 define allowable subject matter as well. Applicants respectfully request that the rejection of claims 1-10 under 35 U.S.C. 102(e) be removed.

Independent claim 11 recites a data processing system for calculating charges for transporting a shipment of freight, said shipment comprising one or more packages, said system comprising:

- a computing device and a display;

- means for entering information about a carrier unit, said information about said carrier unit comprising one or more members of the group consisting of dimensions of said carrier unit, weight capacity of said carrier unit, density capacity of said carrier unit; and length of said carrier unit;

- means for calculating a total volume and a weight capacity of said carrier unit based on said entered information about said carrier unit;

- means for storing said total volume and said weight capacity of said carrier unit;

- means for displaying said total volume and said weight capacity of said carrier unit;

- means for entering a distance a first shipment is to be transported;

- means for entering information about said first shipment, said information about said first shipment comprising one or more members of the following: dimensions of one package in said shipment, volume of one package in said shipment, weight of one package in said shipment, mass of one package in said shipment, dimensions of said shipment; volume of said shipment, weight of said shipment, mass of said shipment, density of said shipment, number of packages in said shipment; and class of said shipment;

means for determining a value for said first shipment of a volume of said first shipment, a density of said first shipment, a total weight of said first shipment, and a total length of said first shipment based on said information entered about said first shipment;

means for storing said values of said volume of said first shipment, said density of said first shipment, said total weight of said first shipment, and said total length of said first shipment based on said information entered about said first shipment;

means for displaying said calculated values for said first shipment;

means for determining the optimal orientation of one or more packages in said first shipment relative to said carrier unit;

means for storing said optimal orientation of said one or more packages in said first shipment;

means for displaying said optimal orientation of said one or more packages in said first shipment;

means for determining an amount of carrier unit total area occupied by said first shipment and a portion of weight capacity occupied by said first shipment;

means for storing said amount of carrier unit area occupied by said first shipment and said portion of weight capacity occupied by said first shipment; and

means for displaying said amount of carrier unit area and said portion of weight capacity occupied by said first shipment.

It is respectfully submitted that O'Neill does not teach or suggest the invention of independent claim 11. For example, O'Neill does not teach or suggest a means for determining the optimal orientation of one or more packages in a first shipment relative to a carrier unit. The arguments above for Claim 1 apply.

Therefore, in view of at least the foregoing, it is respectfully submitted that independent claim 11 is not anticipated by O'Neill, and it is respectfully submitted that independent claim 11 defines allowable subject matter. Also, since claims 12-14 depend either directly or indirectly from claim 11, it is respectfully submitted that claims 12-14 define allowable subject matter as

well. Applicants respectfully request that the rejection of claims 11-14 under 35 U.S.C. 102(e) be removed.

Claim 15 has been previously recited herein.

It is respectfully submitted that O'Neill does not teach or suggest the invention of independent claim 15. For example, O'Neill does not teach or suggest a computer usable medium having computer readable program code means embodied in the medium for determining an optimal orientation for the first shipment in the carrier unit when the code means for determining the optimal orientation of the first shipment in the carrier unit is executed on the data processing system. The arguments above for claim 1 apply.

Therefore, in view of at least the foregoing, it is respectfully submitted that independent claim 15 is not anticipated by O'Neill, and it is respectfully submitted that independent claim 15 defines allowable subject matter. Also, since claims 16-17 depend either directly or indirectly from claim 15, it is respectfully submitted that claims 16-17 define allowable subject matter as well. Applicants respectfully request that the rejection of claims 15-17 under 35 U.S.C. 102(e) be removed.

Accordingly, the applicant respectfully requests reconsideration of the rejections based on at least the foregoing. After such reconsideration, it is urged that allowance of all pending claims will be in order.

Respectfully submitted,



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